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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,330	07/30/2003	Peter P. Antich	UTSW:1041	8756
34725	7590	10/05/2005	EXAMINER	
CHALKER FLORES, LLP			JAWORSKI, FRANCIS J	
12700 PARK CENTRAL, STE. 455			ART UNIT	
DALLAS, TX 75251			PAPER NUMBER	

3737

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/630,330	Applicant(s) ANTICH ET AL.	
	Examiner Jaworski Francis J.	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5-23-05 IDS, 7/15/05 Election.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34, 36-89 are is/are pending in the application.
- 4a) Of the above claim(s) 1-34, 63-86 and 89 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-47, 50-60, 87 and 88 is/are rejected.
- 7) ☒ Claim(s) 48, 49, 61 and 62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5-23-05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

Color photographs and color drawings are not accepted unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Photographs as found in applicants' Figs. 4-6 will be accepted if the conditions for accepting black and white photographs have been satisfied. That is, ordinarily the PTO accepts photographs of subject matter not otherwise easily depictable, specific examples of phenomena are provided in MPEP Section 608.02 Section V. See 37 CFR 1.84(b)(1) and also (2).

The Examiner's understanding of the submitted Richer et al (2005 paper) citation (10) is that there is no literature description of the applicants' enhanced UCR system applicable as prior art.

Applicants' traversal of the restriction requirement is noted however the restrictive categorization is appropriate and subclass searches in class 73 for materials testing structure would add to the search burden proposed. Accordingly the restriction has been finalized and claims 36-62 and 87-88 are present for examination; claim 35

has been cancelled, remaining claims 1-34, 63-86 and 89 stand withdrawn from consideration at this time.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 42, 54 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: structures for the measurement of ultrasound velocity. A transducer in and of itself acts only how it is driven on transmit and receive and it is in unclaimed processing circuitry that measurements associated inter alia with UCR would be performed.

Claims 87-88 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are those associated with the taking of an ultrasound transmitted and received wave measurement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 36 – 43, 50-53, 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Larson III (US5229933) which teaches a transducer 408 comprising a transmitter and concentric receiver array which simultaneously detects reflected target ultrasound onto its receive subarray portion which preferably may comprise 16 -49 elements per col. 4 discussion and is housed in a housing with probe window 112. In consideration of the incompleteness of claim 42 noted above, the Larson transducer would be capable of focus such that the stated +/- 45 degrees is expandable and would be capable of acoustic velocity measurement if connected to suitable focusing and measurement apparatus, these features being non-limiting on the concave phased array itself.

Claims 44-45, 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson as applied to claim 36 above, and further in view of Law et al (US5762066) since whereas the former does not describe containment and window materials it would have been obvious in view of the latter col. 3 lines 38-40 to use water couplant and a latex containment membrane to interface a transducer to biologic tissue.

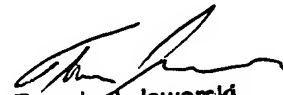
Claim 46, 58, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson as applied to claim 36 above, and further in view of Barthe et al (US6036646) Whereas the former is silent as to computer control of mechanical scanning, it would have been obvious in view of the latter's arm 70 and col. 3 discussion to perform scanning with a concave transducer via computer control of a scanning arm in a waterbath containment.

Claims 47, 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson in view of Law et al as applied to claim 44 above, and further in view of Ohtomo (US5895357). Whereas the former do not use a housing pressure sensor, it would have been obvious in view of element 62 of the latter to do so since excess pressure is also uncomfortable for the patient apposed to the device and disturbs measurements as well.

Allowable Subject Matter

Claims 48 – 49, 61-62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738


Francis J. Jaworski
Primary Examiner

FJJ:fjj

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